

IN THE CLAIMS

Claim 1 (Previously Presented): An isolated or purified  $\beta$ 1,3-1,6 glucan obtained from *Aureobasidium* strain FERM P18099 medium.

Claim 2 (Cancelled)

Claim 3 (Previously Presented): A method for producing  $\beta$ 1,3-1,6 glucan comprising:  
culturing an *Aureobasidium* fungus strain FERM P18099 that produces  $\beta$ 1,3-1,6 glucan in a culture medium for a time and under conditions suitable for production of  $\beta$ 1,3-1,6 glucan in said culture medium.

Claim 4 (Cancelled)

Claim 5 (Previously Presented): The method of Claim 3, further comprising recovering  $\beta$ 1,3-1,6 glucan from the culture medium.

Claim 6 (Original): A culture medium produced by the method of Claim 3.

Claim 7 (Previously Presented): The culture medium of Claim 6, wherein said medium contains about 3-5 mg/ml of *Aureobasidium*  $\beta$ 1,3-1,6 glucan.

Claim 8 (Previously Presented): A composition comprising from about 0.1 to 100 parts by weight of the undiluted culture medium of Claim 6, wherein said composition is not

a medicine, food, food additive, cosmetic or cleaning solution.

Claim 9 (Previously Presented): A composition comprising the  $\beta$ 1,3-1,6 glucan of Claim 1 and a pharmaceutically acceptable excipient or carrier.

Claim 10 (Previously Presented): A food product comprising the  $\beta$ 1,3-1,6 glucan of Claim 1.

Claim 11 (Previously Presented): The food product of Claim 10, wherein said food product is aseptic and comprises 0.001-100 mg/gr of said  $\beta$ 1,3-1,6 glucan.

Claim 12 (Previously Presented): The food product of Claim 10, which is a milk product.

Claim 13 (Previously Presented): A cosmetic or personal care product comprising the  $\beta$ 1,3-1,6 glucan of Claim 1.

Claim 14 (Previously Presented): An antimicrobial solution or disinfectant comprising the  $\beta$ 1,3-1,6 glucan of Claim 1.

Claim 15 (Previously Presented): A composition for binding to, or for removing, an environmental contaminant comprising the  $\beta$ 1,3-1,6 glucan of Claim 1.

Claim 16 (Withdrawn): A method for preventing or treating an inflammatory disease, and infectious disease, or cancer comprising administering an effective dose of the  $\beta$ 1,3-1,6

glucan of Claim 1 to a subject in need thereof.

Claim 17 (Withdrawn): A method for treating chronic articular rheumatism, collagen disease, newly-risen autoimmune disease, virus or bacterial infection, cancer, invasive or metastatic cancer, oncogenic virus, neuropathy, dementia, Alzheimer's disease, hepatic disease, cirrhosis, viral hepatic disease, cryptogenic intractable disease, life habit disease, diabetes, hypertension, arterial sclerosis, osteoporosis, or hemorrhoid comprising administering an effective dose of the  $\beta$ 1,3-1,6 glucan of Claim 1 to a subject in need thereof.

Claim 18 (Withdrawn): A method for sanitizing, or protecting an object from microbial contamination, comprising contacting said object with the  $\beta$ 1,3-1,6 glucan of Claim 1.

Claim 19 (Withdrawn): A method for preventing nosocomial infections, comprising sanitizing hospital personnel, patients, surfaces, equipment, supplies or instruments with the  $\beta$ 1,3-1,6 glucan of Claim 1.

Claim 20 (Withdrawn): A method for removing an environmental contaminant, comprising contacting the contaminant with the  $\beta$ 1,3-1,6 glucan of Claim 1.

Claim 21 (Withdrawn) A method for removing microbes from a body surface comprising contacting said body surface with the  $\beta$ 1,3-1,6 glucan of Claim 1.

Claim 22 (Previously Presented) A product comprising an antimicrobial dosage of the  $\beta$ 1,3-1,6 glucan of Claim 1,

Rejection – 35 U.S.C. § 102(b)

Claims 1, 3, 5, 6, 8 and 13 were rejected under 35 U.S.C. § 102(b) as being anticipated by patent publication JP 62-205008 A to Shinohara et al. Shinohara discloses a  $\beta$ 1,3-1,6 glucan produced by *Aureobasidium* sp. The specific species of *Aureobasidium* is not described, nor is there any disclosure of strain FERM P18099. There is no reasonable basis for believing that the Sinohara *Aurobasidium* sp. is strain FERM P18099, nor believing that it produces the same type of  $\beta$ 1,3-1,6 glucan as strain FERM P18099. Accordingly, the Applicants submit that this rejection should be withdrawn in view of the amendment of the claims to glucans produced by strain FERM P18099.

Rejection – 35 U.S.C. § 102(b)

Claims 1, 3, 5, 6, 8 and 14-15 were rejected under 35 U.S.C. § 102(b) as being anticipated by patent publication JP 06-146036 A to Hasegawa et al. This English Abstract discloses a  $\beta$ 1,3 glucan from *Auerovacidium*. It does not disclose  $\beta$ 1,3-1,6 glucan from *Aureobasidium pullulans* strain FERM P18099. There is no reasonable basis for believing that the Hasegawa  $\beta$ 1,3 glucan is a  $\beta$ 1,3-1,6 glucan or that it is produced and has the characteristics of that produced by strain FERM P18099. Accordingly, the Applicants respectfully request that this rejection be withdrawn.

Rejection – 35 U.S.C. § 103(a)

Claims 1-4 were rejected under 35 U.S.C. § 103(a) as being unpatentable over patent publication JP 06-340701 A to Watanabe et al., in view of Finkelman et al., Canadian Journal of Microbiology, 33(2): 123-127.

The Applicants submit that this rejection may be withdrawn in view of the amendment of the claims to specify that the glucan is produced by strain FERM B18099.